

A NEW ALOE FROM THE EASTERN TRANSVAAL

By G. W. REYNOLDS.

(With Plates XVII and XVIII.)

Aloe modesta Reynolds. Spec. nov., *A. linearifolia* Berger (Leptoaloe) affinis; floribus subsessilibus facile distinguitur. *Planta* parva, succulenta, acaulescens, sub terra bulbiformis. *Folia* 4—6, rosulata, 15—20 cm. longa, 8—9 mm. lata, linearia, sensim attenuata, supra viridia, leviter canaliculata, subtus convexa, ad margines edentata. *Inflorescentia* simplex, 25—30 cm. alta. *Pedunculus* 3—4 mm. diam., levissime incrassatus, bracteis vacuis ovato-acuminatis 15 mm. longis, 6—7 mm. latis munitus. *Bracteae* ovato-acuminatae, 10 mm. longae, 6 mm. latae, subscariosae, 3—5 nervatae. *Pedicelli* 1 mm. longi. *Perigonium* luteo-viridulum, 13 mm. longum, cylindrico-trigonum, 4 mm. diam.; segmenta exteriora libera. *Antherae* 2—3 mm. exsertae. *Stigma* demum 3—4 mm. exserta. *Ovarium* 4 mm. longum, 2.5 mm. diametro. [Plates XVII, XVIII]

SOUTH AFRICA. Transvaal, near Dullstroom, 6,900 ft., coll. J. H. de Wet, cult. Johannesburg, fl. 15 Jan. 1956, Reynolds 7626 holotype (PRE).

Our remarkable new species was discovered by Mr. J. F. de Wet in February 1955, near Nederhorst, about four miles north-east of Dullstroom in the Eastern Transvaal at an altitude of 6,900 ft. When two plants—sent by Mr. de Wet—flowered in Johannesburg in January 1956, I went to Dullstroom and was conducted by Mr. de Wet to a locality where several plants were growing wild in stony ground with grass.

A. modesta provides a link between species in the Section LEPTALOE and some species in the Section LEPTOALOE. Having flowers 13 mm. long, and with perianth outer segments free to base, *A. modesta* seems nearest allied to *A. minima* Bak., and the var. *blyderivierensis*, but in size, leaf characters and habit of growth it is nearest to *A. linearifolia* Berger.

The leaves of *A. modesta* dilate and thicken below ground level, forming an ovoid bulb-like swelling (25 mm. long, 20 mm. diam.) which is a character of *A. kniphofioides* Bak., but the latter has very different leaves, and 35 mm. red flowers.

A striking character of *A. modesta* is that the flowers are densely congested in a subcapitate raceme, and are almost sessile, pedicels being at most only 1 mm. long. This unique character separates *A. modesta* from all other species in both LEPTALOE and LEPTOALOE.

DESCRIPTION: *Plant* acaulescent, succulent, small, solitary.

Roots thick, fleshy, tapering, not fusiform.

Stem none, with the leaves dilating and thickening below ground level and forming an ovoid bulb-like swelling about 25 mm. long, 20 mm. diam.

Leaves 4—6, rosulate, compactly ascending, 15—20 cm. long, 8—9 mm. broad at ground level, linear in lower half, gradually tapering to an acute apex; *upper surface* dull deep green, slightly canaliculate, without spots or markings; *lower surface* rounded, the colour of the upper surface, copiously white-spotted near base only, the spots crowded, dull pale green, lenticular; *margins* with exceedingly narrow cartilaginous edge, straight, edentate.

Inflorescence simple, 25—30 cm. high.

Peduncle 3—4 mm. diam. low down, slightly thickening upwards, with several ovate-acuminate subscarious, sterile-bracts, the lowest 15 mm. long, 6—7 mm. broad, 5—7-nerved, gradually smaller upwards.

Raceme subcapitate, slightly conical, 35—40 mm. long, 30—35 mm. diam., very densely flowered, the buds suberect, open flowers sub-horizontally spreading.

Bracts lowest ovate-acuminate, 10 mm. long, 6 mm. broad, thin, subscarious, 3—5-nerved.

Pedicels 1 mm. long.

Perianth yellowish-green, 13 mm. long, cylindric-trigonus, basally obtuse, cylindric and 4 mm. diam. across the ovary, thence trigonal with the mouth slightly upturned; *outer segments* free to base, obscurely 3-nerved, apices subacute; *inner segments* spatulate, with broad thin white borders and with three crowded nerves forming a greenish keel throughout, the apices more obtuse than the outer.

Filaments pale rose, filiform-flattened, the three inner narrower and lengthening before the three outer with their *anthers* in turn exserted 2—3 mm.

Stigma at length exserted 3—4 mm.

Ovary green, 4 mm. long, 2.5 mm. diam., obtusely tapering into the style.



PLATE XVII. *Aloe modesta* Reynolds.

Plants $\times \frac{1}{3}$ approx., ex near Dullstroom, Eastern Transvaal, 6,900 ft., cult. Johannesburg, fl. 7 Jan. 1956.



FIG. 1.

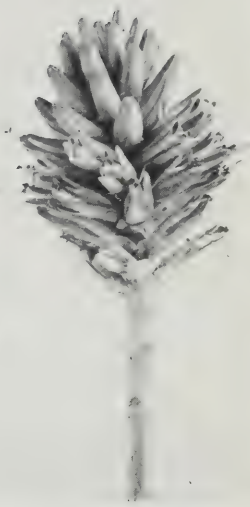


FIG. 2.

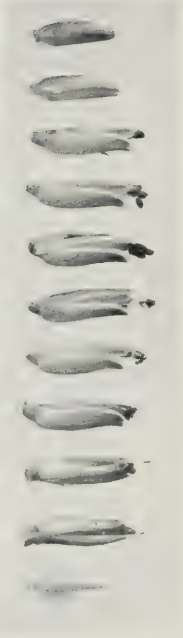


FIG. 3.

PLATE XVIII. *Aloe modesta* Reynolds.

FIG. 1.—Roots, underground swelling, and base of leaves 1/1.

FIG. 2.—Raceme 1/1.

FIG. 3.—Flowers 1/1 from bud to post-pollination stage; also bract 1/1.